UNIQUE IDENTIFICATION (UID)

Unique Identification (UID)
Data Capture

Agenda

- ◆ Introductions
- ◆ UID Overview
  - – What is UID
  - – What is the Strategy for Capturing UID
  - – Expected Timeline
- ◆ Break Out Session (Pedigree Data Elements)
- ◆ Create a Consolidated List of Data Elements
- ◆ Review TIWG Work Item List
- ◆ Next Steps
  - – Review Action Items
  - – Revisit Expected Timeline
  - – Set Time and Date for Next Meeting

What is Unique IDentification (UID)?

UID is . . .

. . . the set of data for assets that is globally unique and unambiguous, ensures data integrity and data quality throughout life, and supports multi-faceted business applications and users.

Enterprise ID (EID)	194532636	
Serial Number	786950	
Original Part Number	1234	

How is the UID Constructed?

- ◆ 2 UID Construction Options[1]

UID Construct #1[2]

DUN194532636	SER786950
EID	Serial No.

UID Construct #2[2]

DUN194532636	PNO1234	SEQ786950
EID	Original Part No.	Serial No.

UID Construct #1			Other
UN194532636786950			5678
IAC	EID	Serial No.	Current Part No.
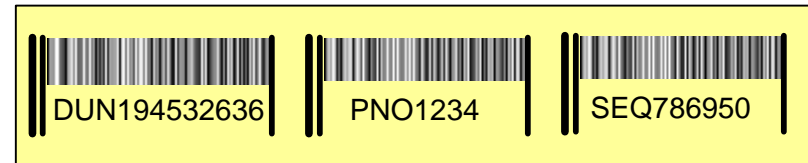
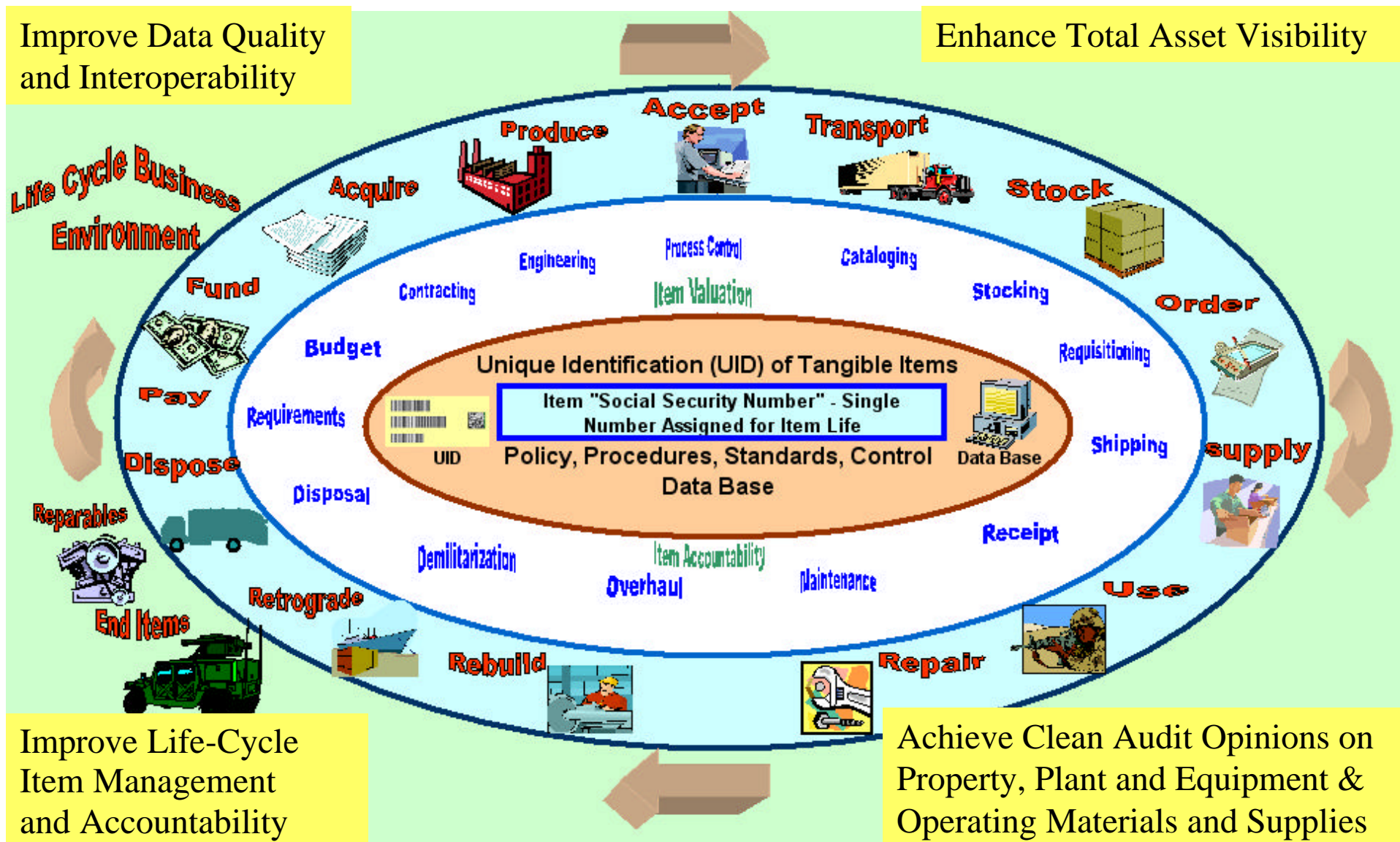| UID Construct #2				Other
UN1945326361234786950				5678
IAC	EID	Original Part No.	Serial No.	Current Part No.
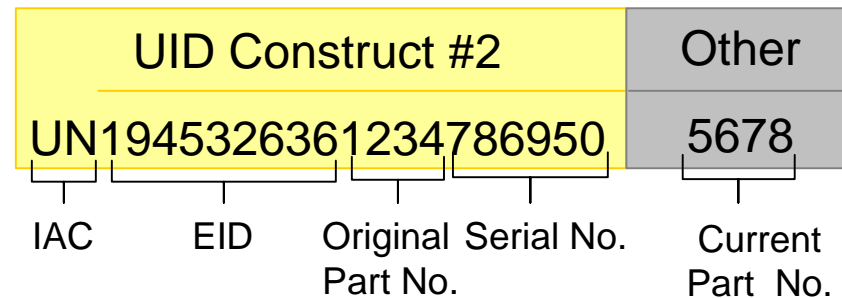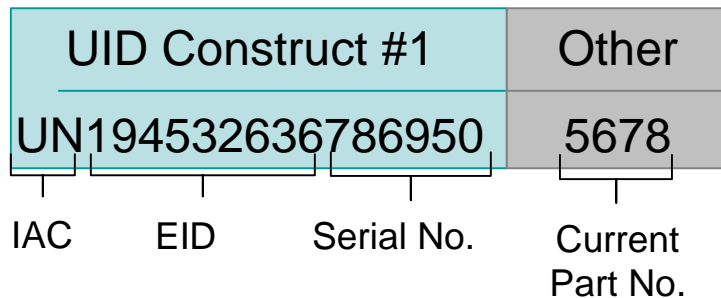
[1] This example uses Text Element Identifiers. EID is a Duns number and the Duns issuing agency code is UN.

[2] Linear bar codes are used for demonstration only, 2-D data matrices are required for UID construction.

The Enterprise Role of UID

Improve Data Quality and Interoperability

Enhance Total Asset Visibility

Improve Life-Cycle Item Management and Accountability

Achieve Clean Audit Opinions on Property, Plant and Equipment & Operating Materials and Supplies

Life Cycle Business Environment

Acquire · Produce · Accept · Transport · Stock · Order · supply · Use · Repair · Rebuild · Retrograde · End Items · Reparables · Dispose · Pay · Fund

Engineering · Process Control · Cataloging · Item Valuation · Contracting · Stocking · Budget · Requisitioning · Requirements · Shipping · Disposal · Demilitarization · Overhaul · Item Accountability · Maintenance · Receipt

Unique Identification (UID) of Tangible Items

Item "Social Security Number" - Single Number Assigned for Item Life

UID · Policy, Procedures, Standards, Control Data Base · Data Base

The Use of UID – Acquisition

- **Birth**
  - Acquisition drives the requirements and capture phases of the UID from the vendor (in compliance with the DFARS rule)

- **Change of Life**
  - Increases the capability for just-in-time replenishment and more accurate restocking

- **Termination**
  - Enables more accurate reporting on item life cycle and performance
  - Increases ability to deter fraud

- **Establishes a metric for implementing performance-based contracting with vendors**

- **Highlights areas where DoD can benefit from aggregate purchasing and implement acquisition process improvements**

The Use of UID – Logistics

♦ **Enables comprehensive, timely data about each uniquely identified item throughout the supply chain**

  – Generation, collection and analysis of maintenance data

  – End-to-end tracking and traceability of unique items

  – Reliability and maintainability information on each item throughout its life cycle

♦ **Improves supply chain efficiency**

  – Reduces administrative costs

  – Reduces stock levels

  – Provides simple, reliable, standardized, real-time, automated data capture and electronic information exchange

♦ **Integrates transportation and movement of individually identified items**

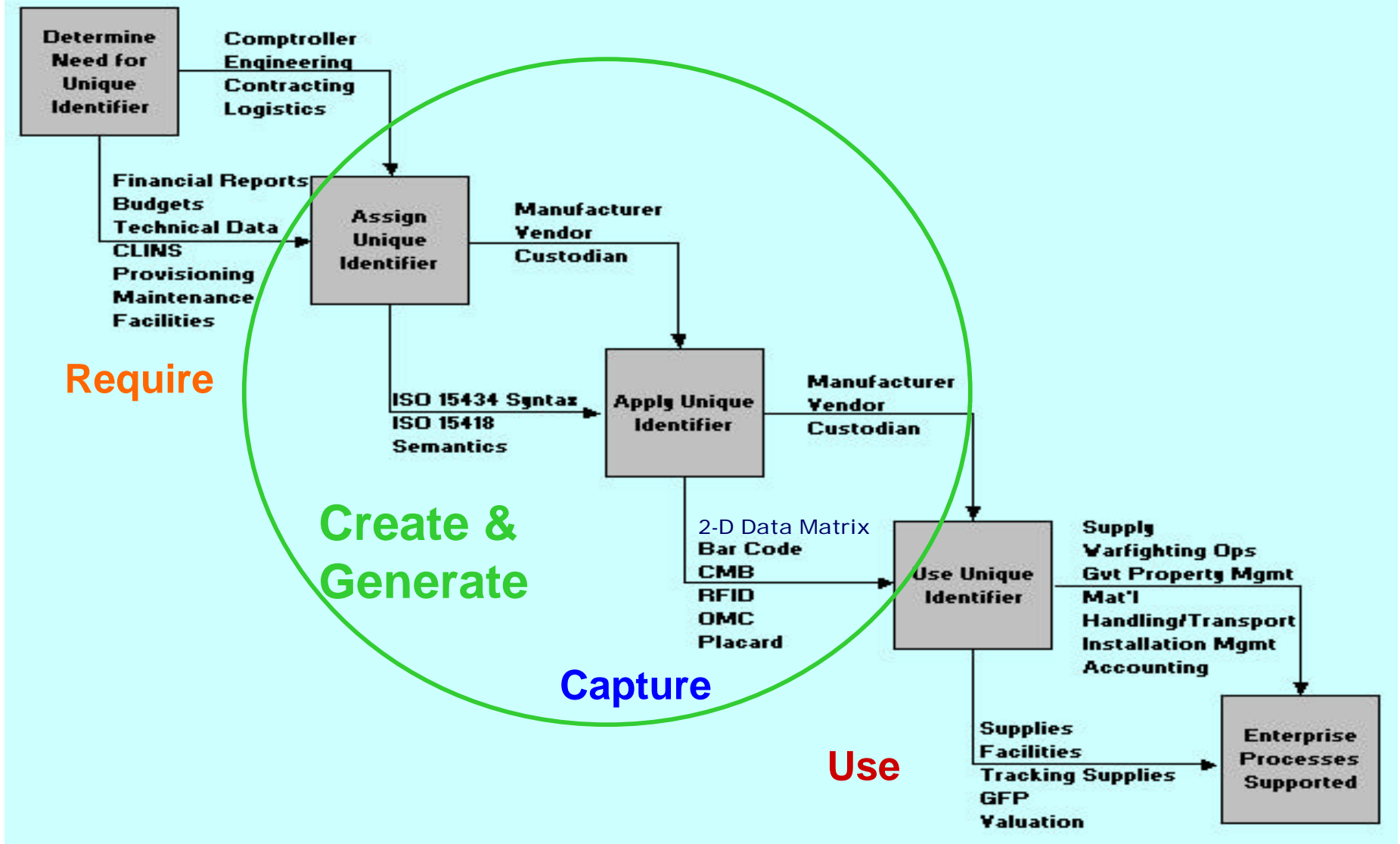♦ **Leverages commercial technologies and practices**

The Use of UID – Finance

♦ Enables clean audit opinions on Property, Plant and Equipment as well as Operating Materials and Supplies

♦ Improves life-cycle item management and accountability
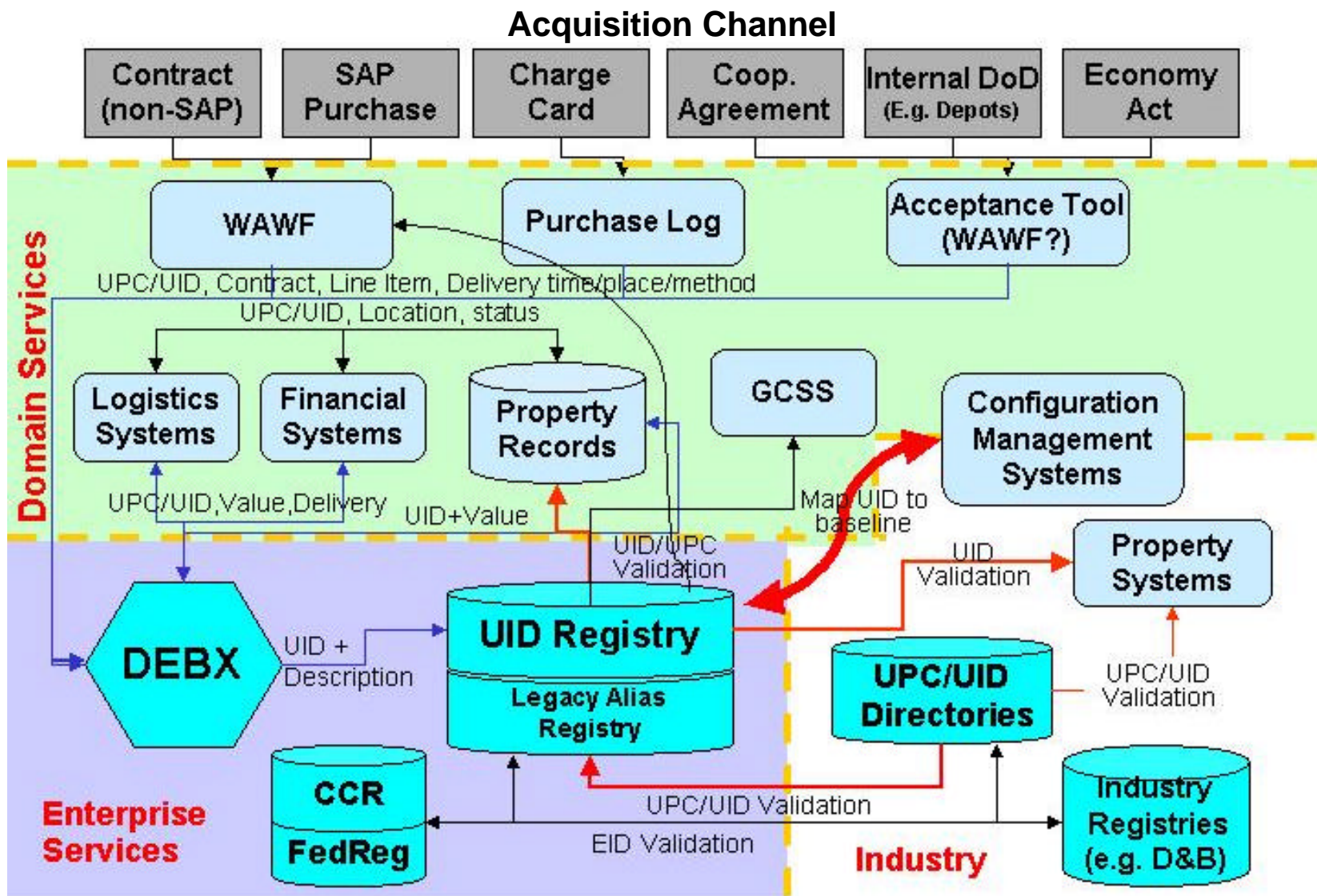
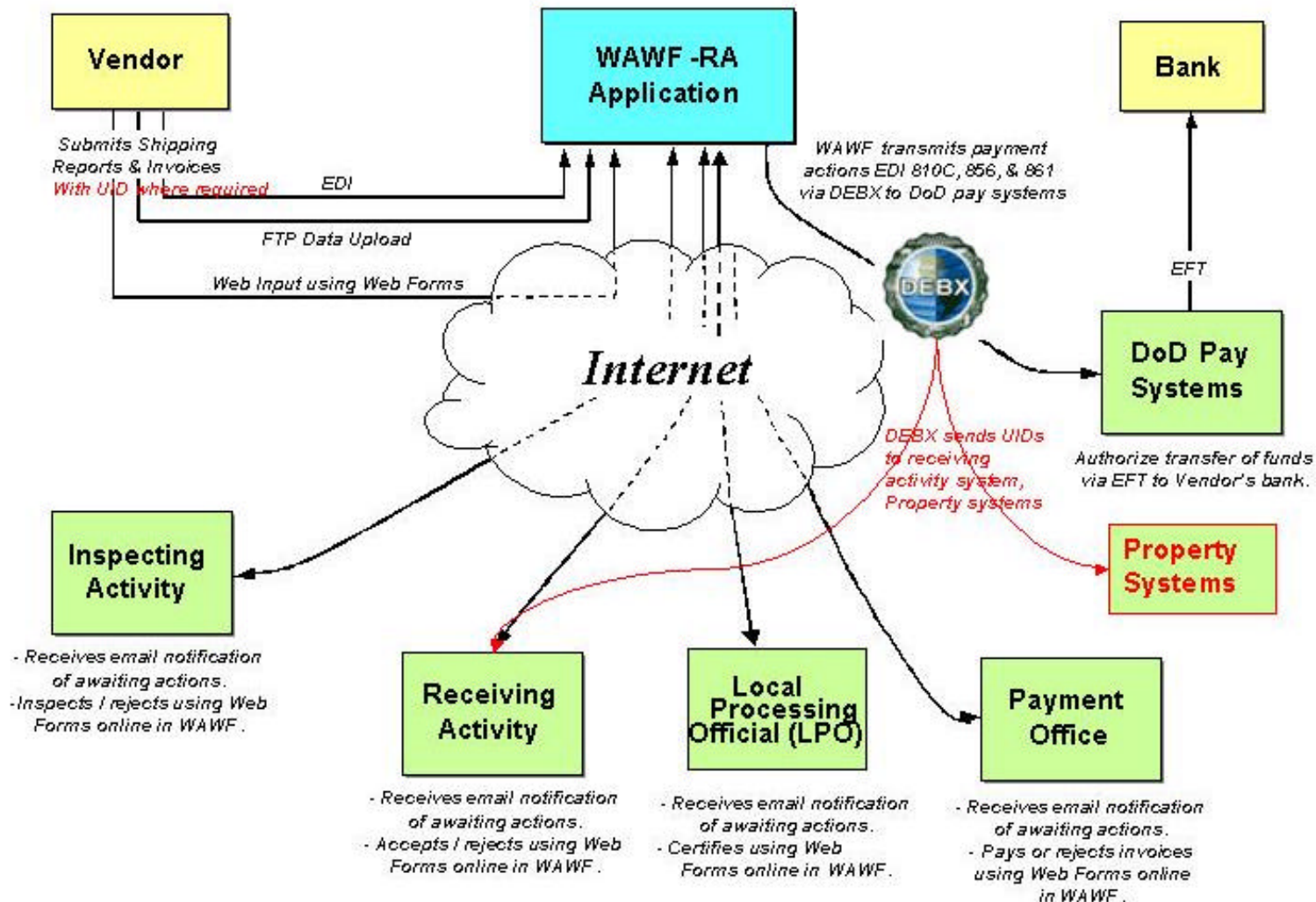♦ Increases data quality, integrity, and interoperability

Who Creates the UID?

Require

Create & Generate
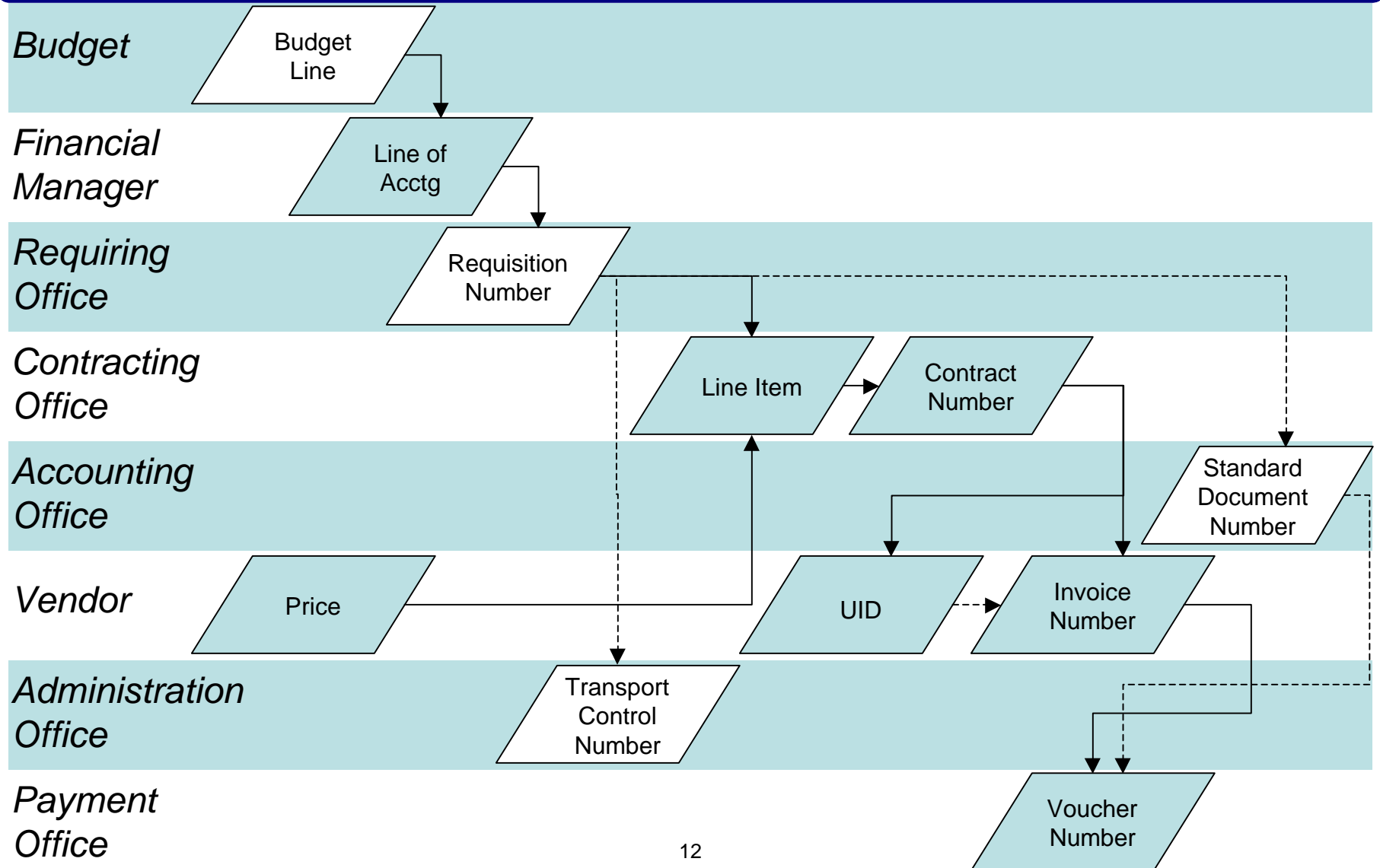
Capture

Use

Determine Need for Unique Identifier

Comptroller
Engineering
Contracting
Logistics

Financial Reports
Budgets
Technical Data
CLINS
Provisioning
Maintenance
Facilities

Assign Unique Identifier

Manufacturer
Vendor
Custodian

ISO 15434 Syntax
ISO 15418
Semantics

Apply Unique Identifier

Manufacturer
Vendor
Custodian

2-D Data Matrix
Bar Code
CMB
RFID
OMC
Placard

Use Unique Identifier

Supply
Warfighting Ops
Gvt Property Mgmt
Mat'l
Handling/Transport
Installation Mgmt
Accounting

Supplies
Facilities
Tracking Supplies
GFP
Valuation

Enterprise Processes Supported

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UID Capture – What It Is

UID Capture and Use – What It Is

Contract Data Genealogy

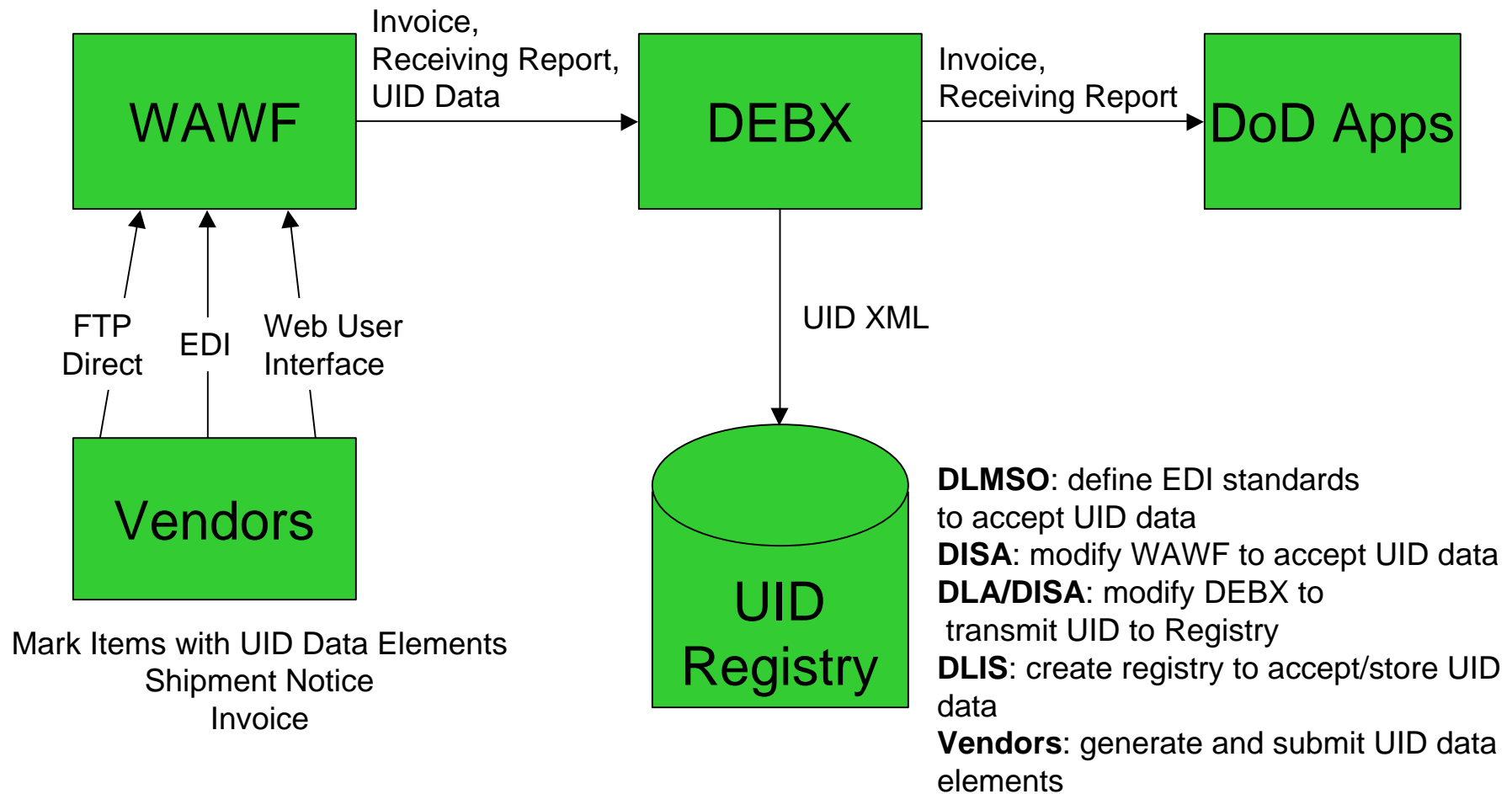|	
Budget	Budget Line
Financial Manager	Line of Acctg
Requiring Office	Requisition Number
Contracting Office	Line Item → Contract Number
Accounting Office	Standard Document Number
Vendor	Price, UID, Invoice Number
Administration Office	Transport Control Number
Payment Office	Voucher Number

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Demonstrating Capture and Reuse

◆ Likely pilots

 – Boeing

 – Lockheed Martin

◆ Proof that UID data can be:

 – Generated by vendors

 – Submitted by vendors

 – Captured in WAWF

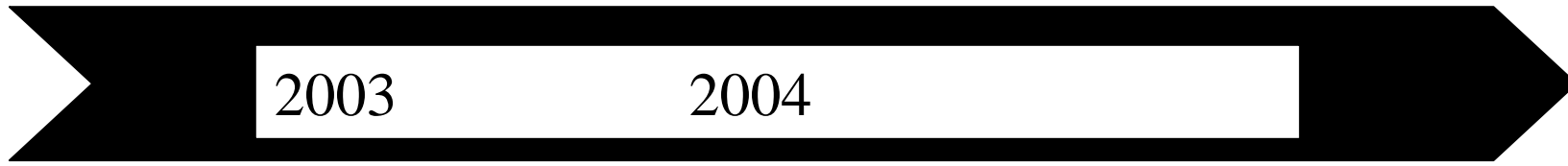 – Transmitted to a central registry

Capture and Use – How It Works

WAWF

Invoice, Receiving Report, UID Data →

DEBX

Invoice, Receiving Report →

DoD Apps

FTP Direct   EDI   Web User Interface

Vendors

Mark Items with UID Data Elements
Shipment Notice
Invoice

UID XML ↓

UID Registry

DLMSO: define EDI standards to accept UID data
DISA: modify WAWF to accept UID data
DLA/DISA: modify DEBX to transmit UID to Registry
DLIS: create registry to accept/store UID data
Vendors: generate and submit UID data elements

Partnership of Stakeholders

Standards Development & Maintenance

DLA

DLMSO

Networking

DISA

UID

Data Storage

DLIS

Support

DCMA

Expected Timeline

| 2003 | | 2004 | | | | |

OCT	NOV	DEC	JAN	FEB	MAR	APR
Requirements Defined	Design Solution Engage Vendors	Development	Development	Unit Test Point-to-Point Test	Integration End-to-End Test	Dry Run IOC
	WAWF DEBX	WAWF DEBX Repository	WAWF DEBX Repository	WAWF DEBX Repository		

The Concept of Pedigree

♦ Pedigree is . . .

– A chart of an individual's ancestors used in human genetics to analyze inherent traits[1]

♦ UID Item Pedigree is . . .

– Characteristics of an item that are present at creation

– Permanent over the life of the item

– Cannot be altered or removed over the life of the item

[1] Webster's Dictionary (paraphrased)

Break Out Session

◆ Create a list of data elements that should be part of the UID Registry

◆ Data elements need to comply with the pedigree boundaries:

– Present at creation

– Permanent over the life of the item

– Cannot be altered or removed over the life of the item

Data Element Comments/Issues

◆ Who are the users of UID registry?

◆ Why do we need any elements in the UID Registry except core UID data elements such as:

 – UID Concatenated
 – Enterprise Identifier (EID)
 – Original Part Number
 – Serial Number
 – Issuing Agency Code (IAC)
 – UID Type (e.g., Construct 1, Construct 2, VIN, GIAI, GRAI)

◆ What should be the UID Registry data element that tells the user where to find more data about the item?

 – Ship-to Code does not provide a good enough link
 – Acceptance Location Code?
 – Transportation Control Number?

Data Element Comments/Issues

◆ There is currently no useful contract data in a database

- Does this deficiency mean we should store contract data in the UID Registry? (Yes)

◆ How do you accept an item that does not have a formal DD250 acceptance process?

- For example, what about sub-components of an end item that are repaired and replaced – they will have no entry in the UID Registry (This item is not an immediate concern – defer to Phase 2)

◆ How do you allocate costs of intangibles (ie data) in the context of UID? (This question has been referred to accounting for resolution)

Data Element Comments/Issues

♦ Standard Document Number (Needs some investigation for its tie to warranty, tying transactions 861, 856, and 527 together)

♦ Drawing Number (Needs engineering input)

♦ Lot and Batch Number (Revisit the need for a third UID construct in the business rules team meeting)

♦ Warranty Data (Defer this to another group that is responsible for capturing and tracking warranty, not currently required by DFARS – needs more investigation)

Data Element Comments/Issues

◆ Is the acquisition cost the price the government pays to the vendor or the price one government entity pays to another government entity (I.e., Services to DLA)? (UID Registry will capture cost from the original vendor, subsequent costs will be maintained by downstream buyers)

◆ What data elements are optional versus required? (More work needs to be done on this topic)

◆ Acceptance date: is DD250 an example or definition and do these definitions conflict with any other definitions for similar types of data? (Definitions will be researched and clarified by the TIWG)

Data Element Comments/Issues

♦ What is the purpose of keeping Unit of Measure in the UID Registry? (The exact need and/or use for this data may be more evident in the future)

♦ If a Program Manager creates the UID through re-serialization or data element reassignment (See business rule 28 and 30) does this deviation from the normal UID construction need to be captured? (The business rules team has determined it does not)

♦ How do you correct a UID if it enters the UID Registry incorrectly? (A business rule should be drafted to address this)

Next Steps

◆ Assign/Review Action Items

◆ Revisit Expected Timeline

◆ Set Time and Date for Next Meeting